

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

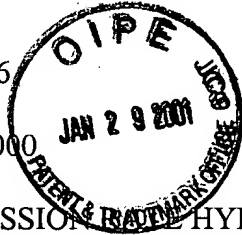
In re Application of:

Karabeyoglu, et al.

Serial No.: 09/505,516

Filed: February 17, 2000

For: HIGH REGRESSION RATE HYBRID  
ROCKET PROPELLANTS AND  
METHOD OF SELECTING



Examiner: E. Miller

Group Art Unit: 3641

San Francisco, CA 94111

Date: January 25, 2001

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*Cyler*  
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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being sent via U.S. Mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231 on January 25, 2001.

Signed: *Diana M. Bradley*

Diana M. Bradley

**AMENDMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

This is in response to the Office Action dated July 28, 2000 in the above-referenced application. Please amend the application as follows:

**IN THE SPECIFICATION:**

Page 14, line 4 delete "a" and insert -- $\sigma$ --.

**IN THE CLAIMS:**

Please amend the claims as follows:

*C/sub 21*  
*Cont.*

14. A method of selecting a propellant that exhibits desirable regression rate during combustion within a port having a gas stream flowing through the port, comprising the steps of:  
selecting a propellant having under heat transfer from the gas stream flowing through the port, a liquid layer with surface tension  $\sigma$  and liquid viscosity  $\mu$ , values that promote entrainment of droplets from said liquid layer into said gas stream flowing in said port;  
determining for the selected propellant a  $a_{onset}$  [for a given port mass flux,  $G = \rho_g U_g$ , where